

# Work Order ID 100041

April 17, 2013 7:50:51 AM

**\*100041\***

Page 1

Item ID: D3186-2M

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: SPACEPOD DOOR RH

Start Date: 4/17/13 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 5/10/13 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan:

*CL*

Date: 13/04/17 Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NP2\***

Work Order

Quantity

Draw Code	Accept Qty	Reject Qty	Reject Number	Exp. Stamp
-----------	------------	------------	---------------	------------

Draw Nbr

Revision Nbr

D3186

Rev E

100

0.00

**\*100\***

PURCHASING

0.00

Purchasing

Memo

Purchasing

Issue P/O:

*19599*

Description: D3186-2MDoor

Supplier: Delastek

Conformity Certificate and Process sheet required

Ship 3 Items from Previous steps

*CL 13/04/17 ①*

110

Receive & Inspect for Damage & Mat'l Certs

0.00

**\*110\***

Packaging

Memo

0.00

Packaging

Ensure a copy of certification of conformity and process sheet from Delastek is attached.

*13/7/12 ①*

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

**FAULT CATEGORY**

Landing Gear	General	Other
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete
<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions
		<input type="checkbox"/> Ovalized
		<input type="checkbox"/> Over/Under tolerance
		<input type="checkbox"/> Part Incorrect
		<input type="checkbox"/> Part Lost/Missing
		<input type="checkbox"/> Part Moved
		<input type="checkbox"/> Positioned Wrong
		<input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced
		<input type="checkbox"/> Temperature/Cure
		<input type="checkbox"/> Weld
		<input type="checkbox"/> Wrong Stock Pulled
		<input type="checkbox"/> Other

# Work Order ID 100041

April 17, 2013 7:50:51 AM

**\*100041\***

Page 2

Item ID: D3186-2M

Revision ID:

Item Name: SPACEPOD DOOR RH

Start Date: 4/17/13 Start Qty: 1.00

Required Date: 5/10/13 Req'd Qty: 1.00

Reference:

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Stop **\*NS2\***

Cust Item ID:

Customer:

Approvals: Process Plan: Date:

QC: Date:

Tooling: Date:

SPC (Y/N): Date:

Run Start **\*NR1\***

Stop **\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
----	--------	-----------	------------	------------	---------------	-------------

120

QC6- Inspect dimensions to drawing

0.00

**\*120\***

QC

Memo

Quality Control

Check for void spot and pins.

DAS  
0.00 16  
9-89 1460401

130

Identify as per dwg & Stock Location: *composites*

0.00

**\*130\***

Packaging

Memo

Packaging

0.00

BT 14-04-01 (x1)

140

QC21- Final Inspection - Work Order Release

0.00

**\*140\***

QC

Memo

Quality Control

0.00

MLJ 140401

(H) 140401

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____				<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Thermoforming <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/>            Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/>            Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Quality <input type="checkbox"/>            Other <input type="checkbox"/> </div> </div>					
<b>Root Cause</b>	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											

FAULT CATEGORY				
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Other	

# Picklist Print

April 17, 2013 7:50:51 AM

Page 1

Work Order ID: 100041

Parent Item: D3186-2M

Parent Item Name: SPACEPOD DOOR RH

Start Date: 4/17/13

Required Date: 5/10/13

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A New Issue 06-12-04 ec  
IPP rev D rv D dwg 07.03.07 ec

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3186-2P Spacepod Door		Purchased	No			110	Each	0.0000	1	1			

100041

4/17/13 (1)

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

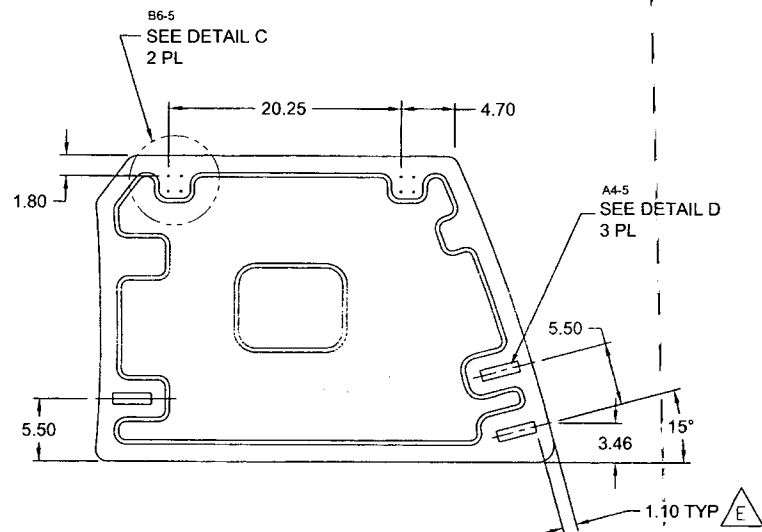
QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Material <input type="checkbox"/>									
Setup <input type="checkbox"/>									
Other <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

**FAULT CATEGORY**

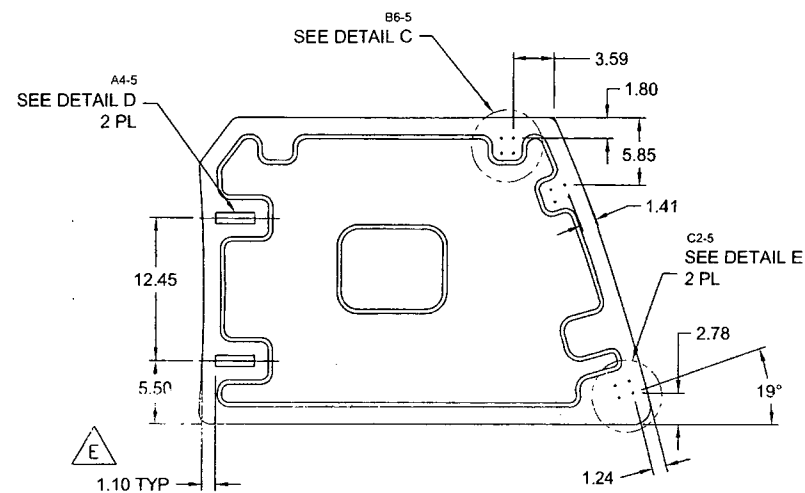
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions  <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Other



**D3186-1 SPACEPOD DOOR, LH**  
MAKE FROM D3186-1M

**NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A



**D3186-3 SPACEPOD DOOR, LH**  
MAKE FROM D3186-1M

**RELEASED**  
2009-09-09

CL 13/04/17  
W/O: 100041

E	DRAWING UPDATED TO CURRENT STANDARDS. 1.10 WAS 0.98 (ZN B5-1, B4-1, B7-2, B1-2); R0.12 WAS 0.125 (ZN B5-5); REF PAR 09-026	RF	09.07.08
D	UPDATE DIMENSIONS	LE	07.02.22
C	REMOVED D0600-XXX LABELS	LE	06.12.13
B	DIMS UPDATED TO MATCH PRODUCT FOAM PATTERN UPDATED D3186-1M/-2M/-3M/-4 ADDED	LE	06.09.25
A	NEW ISSUE	CP	03.03.27
REV.	DESCRIPTION	BY	DATE
DESIGN	DS	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	RF	DRAWING NO.	REV. E
MFG. APPR.	RF	D3186	SHEET 1 OF 5
APPROVED	RF	TITLE	SCALE
DE APPR.	RF	SPACEPOD DOOR	NTS
DATE	09.07.08	COPYRIGHT © 2003 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL. HAS IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

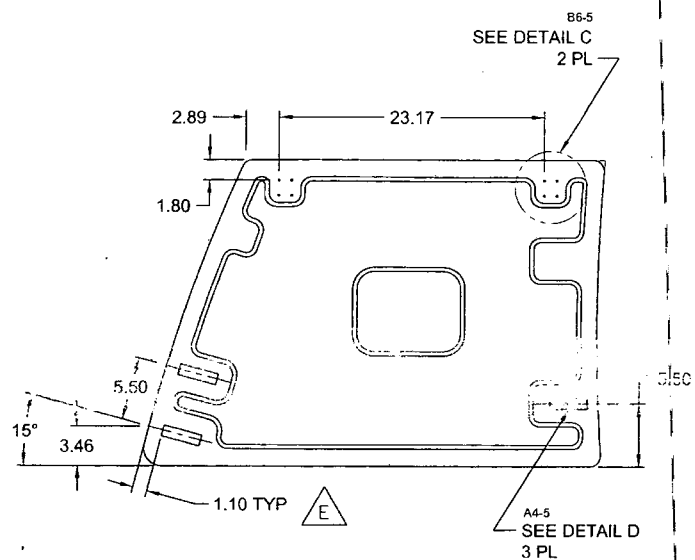
Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

**FAULT CATEGORY**

Landing Gear	General	Other
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete
<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions
		<input type="checkbox"/> Ovalized
		<input type="checkbox"/> Over/Under tolerance
		<input type="checkbox"/> Part Incorrect
		<input type="checkbox"/> Part Lost/Missing
		<input type="checkbox"/> Part Moved
		<input type="checkbox"/> Positioned Wrong
		<input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced
		<input type="checkbox"/> Temperature/Cure
		<input type="checkbox"/> Weld
		<input type="checkbox"/> Wrong Stock Pulled
		<input type="checkbox"/> Other

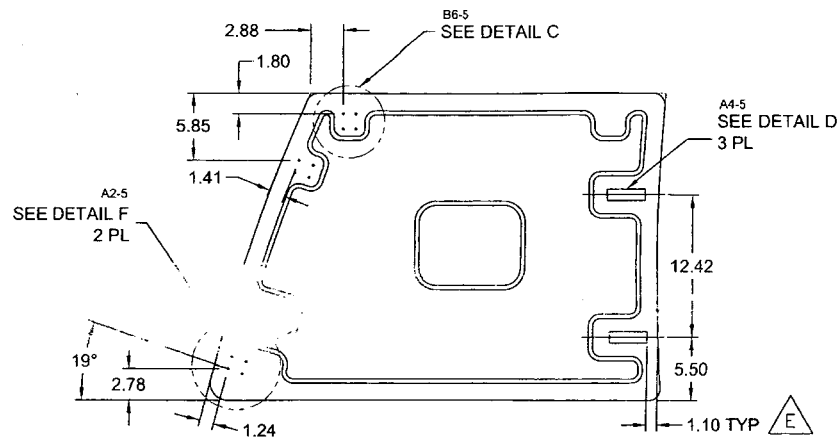




**D3186-2 SPACEPOD DOOR, RH**  
MAKE FROM D3186-2M

**NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A



**D3186-4 SPACEPOD DOOR, RH**  
MAKE FROM D3186-2M

**RELEASED**  
2009-09-09

DESIGN	DS	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. E
MFG. APPR.	<i>[Signature]</i>	D3186	SHEET 2 OF 5
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	SPACEPOD DOOR	NTS
DATE	09.07.08	COPYRIGHT © 2003 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

NCR: Yes / No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

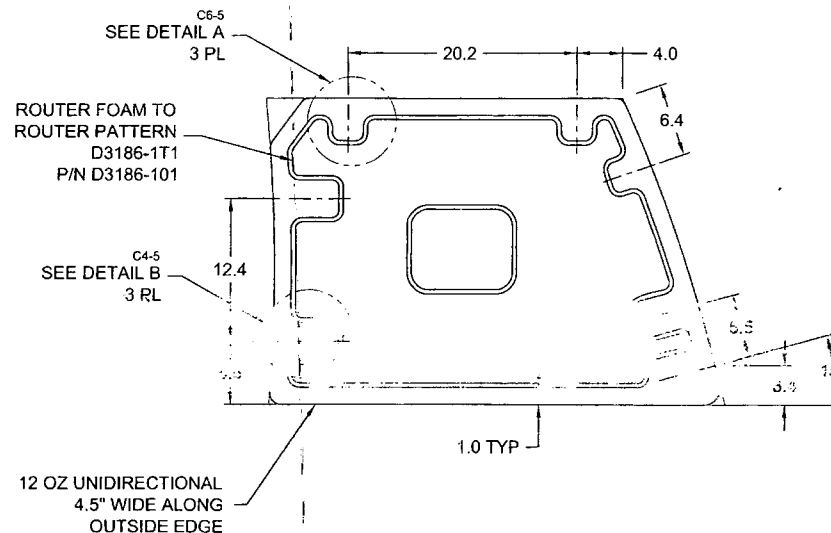
Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  <div style="display: flex; justify-content: space-around;"> <div>             Rework <input type="checkbox"/>              Scrap <input type="checkbox"/>              Use-as-is <input type="checkbox"/>              Work Order Update <input type="checkbox"/> </div> <div>             Skid-tube <input type="checkbox"/>              Machining <input type="checkbox"/>              Thermoforming <input type="checkbox"/>              Large Fab <input type="checkbox"/> </div> <div>             Crosstube <input type="checkbox"/>              Small Fab <input type="checkbox"/>              Finishing <input type="checkbox"/>              Composite <input type="checkbox"/> </div> <div>             Water Jet <input type="checkbox"/>              Prod. Eng. Coord. <input type="checkbox"/>              Rec/Store/Packaging <input type="checkbox"/>              Supplier <input type="checkbox"/> </div> <div>             Engineering <input type="checkbox"/>              Quality <input type="checkbox"/>              Other <input type="checkbox"/> </div> </div>	<b>AGAINST DEPARTMENT/PROCESS</b>
--	--	-----------------------------------

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Material <input type="checkbox"/>									
Setup <input type="checkbox"/>									
Other <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions  <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Other
---	---	--

MAIN LAYUP  
 9 OZ SATIN (9 SQ FEET)  
 9 OZ SATIN (9 SQ FEET)  
 FOAM  
 9 OZ SATIN (9 SQ FEET)  
 12 OZ UNIDIRECTIONAL  
 9 OZ SATIN (9 SQ FEET)  
 RESIN (35-45% BY WEIGHT)  
 PEEL PLY



**D3186-1M SPACEPOD DOOR AS MOLDED**

**NOTES:**

**1) MATERIAL:**

RESIN = EPOCAST 50-A/9816 OR DERAKANE 470-36/411/510A40

FOAM = 3/8", A500 CORE-CELL OR DIVINYCELL OR AIREX OR KLEGECELL

FIBRE = 9.7 OZ 7781 WEAVE "S" GLASS ("9 OZ SATIN")

12 OZ UNIDIRECTIONAL FIBERGLASS ("12 OZ UNIDIRECTIONAL")

LAMINATE PER DART QSI 006 4.0

LAMINATION SCHEDULE PER THIS DRAWING

**2) FINISH:** FINISH INSIDE/OUTSIDE WITH DUPONT HIGHBUILD GREY PRIMER 1144-S

**3) TOLERANCES:** PER DART QSI 018 UNLESS OTHERWISE NOTED

**4) UNITS:** INCHES UNLESS OTHERWISE NOTED

**5) BREAK SHARP EDGES:** 0.005 TO 0.010 MAX

**6) IDENTIFICATION:** NONE

**7) WEIGHT:** 7.0 lbs

**8) USE MOLD DT8005 FOR DOOR LAYUP**

**RELEASED**  
 2009-08-08

DESIGN	DS	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	RF	DRAWING NO.	REV. E
MFG. APPR.		D3186	SHEET 3 OF 5
APPROVED		TITLE	SCALE
DE APPR.		SPACEPOD DOOR	NTS
DATE	09.07.08	COPYRIGHT © 2003 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR REPRODUCED IN ANY FORM OR BY ANY MEANS WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

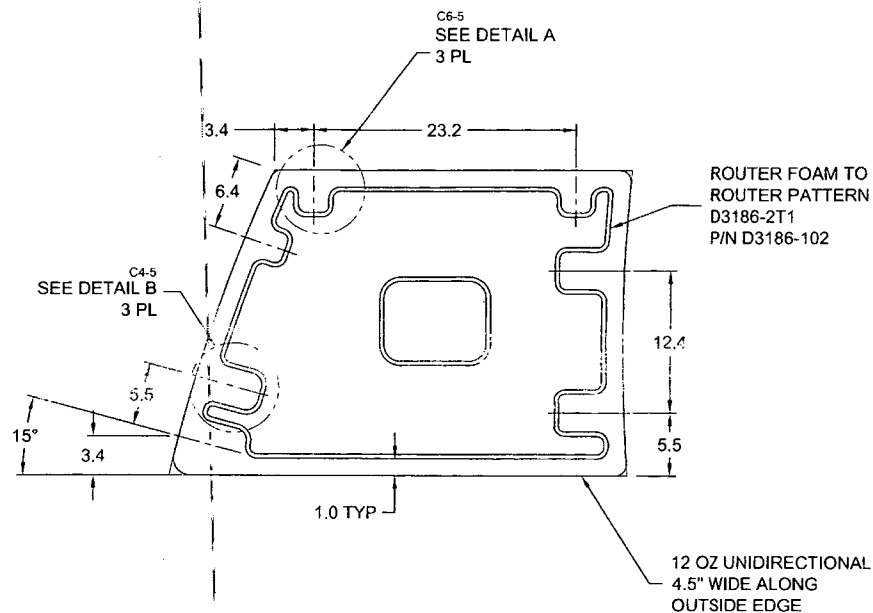
DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____				<b>DISPOSITION</b>  <div style="display: flex; justify-content: space-around;"> <div>             Rework <input type="checkbox"/>              Scrap <input type="checkbox"/>              Use-as-is <input type="checkbox"/>              Work Order Update <input type="checkbox"/> </div> <div>             Skid-tube <input type="checkbox"/>              Machining <input type="checkbox"/>              Thermoforming <input type="checkbox"/>              Large Fab <input type="checkbox"/> </div> <div>             Crosstube <input type="checkbox"/>              Small Fab <input type="checkbox"/>              Finishing <input type="checkbox"/>              Composite <input type="checkbox"/> </div> <div>             Water Jet <input type="checkbox"/>              Prod. Eng. Coord. <input type="checkbox"/>              Rec/Store/Packaging <input type="checkbox"/>              Supplier <input type="checkbox"/> </div> <div>             Engineering <input type="checkbox"/>              Quality <input type="checkbox"/>              Other <input type="checkbox"/> </div> </div>		<b>AGAINST DEPARTMENT/PROCESS</b>						
<b>Root Cause</b>	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector			
Doc/Data <input type="checkbox"/>												
Equip/Tooling <input type="checkbox"/>												
Operator <input type="checkbox"/>												
Material <input type="checkbox"/>												
Setup <input type="checkbox"/>												
Other <input type="checkbox"/>												
Process <input type="checkbox"/>												
Supplier <input type="checkbox"/>												
Training <input type="checkbox"/>												
Unapproved <input type="checkbox"/>												
<b>FAULT CATEGORY</b>												
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Other	

# MAIN LAYUP

9 OZ SATIN (9 SQ FEET)  
 9 OZ SATIN (9 SQ FEET)  
 FOAM  
 9 OZ SATIN (9 SQ FEET)  
 12 OZ UNIDIRECTIONAL  
 9 OZ SATIN (9 SQ FEET)  
 RESIN (35-45% BY WEIGHT)  
 PEEL PLY



## NOTES:

### 1) MATERIAL:

RESIN = EPOCAST 50-A/9816 OR DERAKANE 470-36/411/510A40  
 FOAM = 3/8", A500 CORE-CELL OR DIVINYCELL OR AIREX OR KLEGECELL  
 FIBRE = 9.7 OZ 7781 WEAVE "S" GLASS ("9 OZ SATIN")  
 12 OZ UNIDIRECTIONAL FIBERGLASS ("12 OZ UNIDIRECTIONAL")  
 LAMINATE PER DART QSI 006 4.0  
 LAMINATION SCHEDULE PER THIS DRAWING

2) FINISH: FINISH INSIDE/OUTSIDE WITH DUPONT HIGHBUILD GREY PRIMER 1144-S

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: NONE

7) WEIGHT: 7.0 lbs

8) USE MOLD DT8006 FOR DOOR LAYUP

## D3186-2M SPACEPOD DOOR AS MOLDED

RELEASED  
 2009-09-09

DESIGN	DS	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	RF	DRAWING NO.	REV. E
MFG. APPR.	RF	D3186	SHEET 4 OF 5
APPROVED	RF	TITLE	SCALE
DE APPR.	RF	SPACEPOD DOOR	NTS
DATE	09.07.08	COPYRIGHT © 2003 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

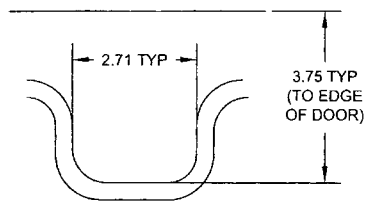
QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width:100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

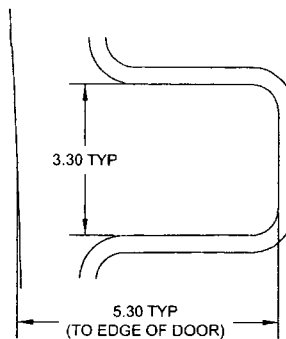
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

**FAULT CATEGORY**

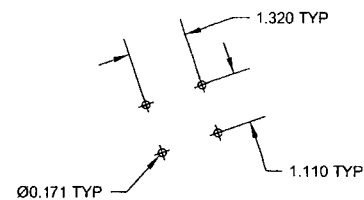
Landing Gear	General	Other
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete
<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions
		<input type="checkbox"/> Ovalized
		<input type="checkbox"/> Over/Under tolerance
		<input type="checkbox"/> Part Incorrect
		<input type="checkbox"/> Part Lost/Missing
		<input type="checkbox"/> Part Moved
		<input type="checkbox"/> Positioned Wrong
		<input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced
		<input type="checkbox"/> Temperature/Cure
		<input type="checkbox"/> Weld
		<input type="checkbox"/> Wrong Stock Pulled
		<input type="checkbox"/> Other



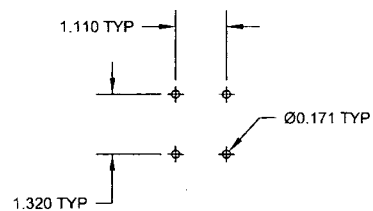
**DETAIL A** D6-3  
SCALE 4X D4-4



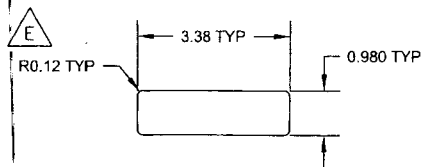
**DETAIL B** C6-3  
SCALE 4X C6-4



**DETAIL E** C1-1  
SCALE 4X

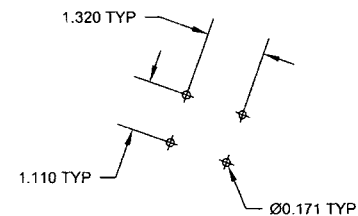


**DETAIL C** D7-1  
SCALE 4X D3-1  
D6-2  
D3-2



NOTE: ENSURE THAT CUTOUT IS PERPENDICULAR TO EDGE OF DOOR

**DETAIL D** C5-1  
SCALE 4X D4-1  
B6-2  
C2-2



**DETAIL F** C4-2  
SCALE 4X

**RELEASED**  
2009-09-09

DESIGN	DS	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D3186	SHEET 5 OF 5
APPROVED		TITLE	SCALE
DE APPR.		SPACEPOD DOOR	NTS
DATE	09.07.08	COPYRIGHT © 2003 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

NCR: Yes / No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Material <input type="checkbox"/>									
Setup <input type="checkbox"/>									
Other <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions  <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Other
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Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO19599

Purchase Order Date 4/17/13

PO Print Date 4/17/13

Page Number 1 of 1

Order From :

VU-DEL003

DELASTEK INC

2699 5E AVENUE, LOCAL C.P 10100

GRAND-MERE, QC G9T 5K7  
CA

Contact Name

Vendor Phone

819 533 5788

Vendor Fax

819 533 3494

Vendor Account Nbr

Buyer

Chantal Lavoie

Requisition Nbr

Tax Resale Nbr

10127-2607

Terms

Net 30

Currency

USD

FOB

Destination-Collect

Ship To :

DART AEROSPACE LTD

1270 ABERDEEN

HAWKESBURY, ON K6A 1K7

CANADA

**FAKED**  
08/13/04/17

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	D3186-2P	Spacepod Door	5/10/13 Yes	1.00 Each	FedEx PI collect	\$711.0000	\$711.00
		Special Inst.	AS PER DWG D3186 REV. E B100038				
2	D3186-2P	Spacepod Door	5/10/13 Yes	1.00 Each	FedEx PI collect	\$711.0000	\$711.00

Special Inst: AS PER DWG D3186 REV. E  
B100041

PO Total:

\$1,422.00

CERTIFICATE OF CONFORMITY  
REQ'D UPON DELIVERY

MATERIAL CERTIFICATION  
REQ'D UPON DELIVERY

Change Nbr: 1

Change Date: 4/17/13

No substitution or deviation without  
consent.

Certificate of Conformity or Material  
Certification required - YES NO

Mastering Innovation

**DELASTEK**

DELASTEK Inc.  
2699 5e Avenue  
Localité 14, C.P. 10100  
Grand-Mère, Québec G9T 5K7  
Canada  
Tel.: (819) 533-5788  
Fax: (819) 533-3494

# PACKING SLIP

## CERTIFICATE OF COMPLIANCE

Invoice No.	48661
Customer No.	DART US

**Bill To****Ship To**

DART AEROSPACE LTD  
1270, Aberdeen Street  
Hawksbury, Ontario K6A 1K7  
Canada

DART AEROSPACE LTD  
1270, Aberdeen Street  
Hawksbury, Ontario K6A 1K7  
Canada

Telephone : 613-632-5200

Contact : Linda Lacelle

Telephone : 613-632-5200

Contact : Linda Lacelle

Ship Date	Order Date	Our SO #	Ordered by	Your PO#	Terms
11-07-2013	22-04-2013	23381	Brigitte Golden	19599	Net 30 days USA
Ship Via		F.O.B.		Salesperson	GST/PST
FEDEX P1 Collect		Point de départ		Mathieu Doucet, ext.690	
Order Qty	B.O. Qty	Current Ship.	Item number	Description	
1	0	1	DKC134-0060	Line 2 N° D3186-2M Spacepod Door RH U of M: Chaque B100041 Dwg. D3186 Rév.: E JOB:53503 Serial # Lot # 53503 53503	

*It is hereby certified that all materials, process and finished items were controlled and tested in accordance with the requirements of the purchase order and applicable specifications. All such records are on file at our plant and available for review upon request*

Accepted by:

Quality department

AQ-357



☐ Cust. ☐ Adm. ☐ Quality ☐ Ship.

Date: Mardi, 2013-06-18 12:42:04  
 Utilisateur: Stéphane Lessard

## Feuille de Procédé



Client	: DART US DART AEROSPACE	Nom Dessin	: SPACEPOD DOOR RH
Numéro Job	: 53503	Numéro Article	: DKC134-0060
Numéro	: 3769	Numéro Dessin	: --
Numéro B.A.	:	Projet Numéro	: DK-362
Cette fois	: 2013-06-18 No. :	Révision dessin	:
Prsht Rev.	: NC	Matériel	: 7781 & 411-350
Prem. fois	: - - Type :	Date Dûe	: 2013-06-25
Job précédente	: 51517	Qté:	1 Ud UNITE
Écrit par	: 4359 SL		
Vérifié & Approuvé par	:		
Commentaires	: N° de dessin: D3186-2M rev. E		

E.O.: N/A

 Feuille de Procédé Rév.: 03 AMB0349 remplacé par  
 AMB0511 (réf. RFC #226)

Formulaire d'inspection: N/A

Produit additionnel

Numéro Job:



# Séq.:	Machine ou	Description :
---------	------------	---------------

1.0	AAC1616	N° 83634, Frekote Loctite Wolo
-----	---------	--------------------------------

Comment Qty.:	0.050 UNITE(s)/Unit	Total :	0.050 UNITE(s)
	N° 83634, Frekote Loctite Wolo	N° de Lot:	1-37420-1

2.0	PRÉPARATION	Préparation du moule
-----	-------------	----------------------



Comment Setup:	0.00Hrs/ Run:	5.0000Min	Total Run :	0.0833Hrs
----------------	---------------	-----------	-------------	-----------

Faire la préparation du moule N° DT 8006 selon IG 0009.

Date: 20/06/13 Sceau: 4440 CS

3.0	AAC1885	Tissu à délaminer Release ply B
-----	---------	---------------------------------

Comment Qty.:	3.28 VERGE(s)/Unit	Total :	3.28 VERGE(s)
	Tissu à délaminer Release ply B	# de Lot:	N/A

4.0	AAC1887	Wrightlon 5200 Bleu P3
-----	---------	------------------------

Comment Qty.:	3.59 VERGE(s)/Unit	Total :	3.59 VERGE(s)
	Wrightlon 5200 Bleu P3	# de Lot:	N/A

5.0	AC0885	Feutre de drainage N° Airweave N 10
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Comment Qty.:	3.00 VERGE(s)/Unit	Total :	3.00 VERGE(s)
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Date: Mardi, 2013-06-18 12:42:04

Utilisateur: Stéphane Lessard

**Feuille de Procédé**

Client: DART US DART AEROSPACE

Nom Dessin: SPACEPOD DOOR RH

Numéro Job: 53503

Numéro DKC134-0060

Numéro Job:



# Séq.: Machine ou Opération: Description :

6.0 AC0943 Stretchlon 200 poche à vide Vert

Comment Qty.: 3.00 VERGE(s)/Unit Total : 3.00 VERGE(s)

7.0 AMB0214 9.7 oz Weave "S" glass #FG-778150-125Y Volan Finish

Comment Qty.: 4.50 VERGE(s)/Unit Total : 4.50 VERGE(s)

9.7 oz Weave "S" glass #FG-778150-125Y Volan Finish

N° de Lot: 1-41291-1

8.0 AC0886 Ruban à gommer jaune #: T/AT-200Y

Comment Qty.: 2.2500 ROULEAU(s)/Unit Total : 2.2500 ROULEAU(s)

9.0 AMB0511 N° TG-13-U, Fiberglass 13 oz

Comment Qty.: 1.00 VERGE(s)/Unit Total : 1.00 VERGE(s)

N° TG-13-U, Fiberglass 13 oz

N° de Lot: 1-36302-1

10.0 PREP-GENERAL Préparation du matériel



Comment Setup: 0.00Hrs/ Run: 30.0000Min Total Run: 0.5000Hrs

Tailler le matériel selon les différents patrons de découpe.

Appliquer le ruban jaune tout le tour du stretchlon 200 en laissant le papier sur le coté non en contact avec le sac à vide.

Afin d'accélérer le processus de taillage, tailler les plis de 9.7 oz. tous en même temps en les superposants les uns sur les autres.

Date: 18/06/13 Sceau: 4440 CS

11.0 AMB0286 Catalyst N° DDM-9

Comment Qty.: 0.0080 GALLON(s)/Unit Total : 0.0080 GALLON(s)

Catalyst N° DDM-9

N° de Lot: 1-27829-1

12.0 AMB0212 Résine (411B7530) 411-350 promo. 75min.

Comment Qty.: 0.500 LITRE(s)/Unit Total : 0.500 LITRE(s)

Résine (411B7530) 411-350 promo. 75min.

N° de Lot: 1-41438-1

13.0 PREP-GENERAL Préparation du matériel












Comment Setup: 0.00Hrs/ Run: 5.0000Min Total Run : 0.0833Hrs

Faire la préparation de la résine selon les quantités requises, mix ratio 1.5% catalyst par quantité de résine.

Date: 20/06/13 Sceau: 4440 CS



## Feuille de Procédé

Client: DART US DART AEROSPACE		Nom Dessin: SPACEPOD DOOR RH	
Numéro Job: 53503		Numéro DKC134-0060	
Numéro Job:			
# Séq.:	Machine ou Opération:	Description :	
14.0	LAMINAGE	Faire le laminage	
			
Comment Setup: 0.00Hrs/ Run: 15.0000Min Total Run : 0.2500Hrs			
À l'aide d'un rouleau de 2" dia. appliquer une couche de résine sur le moule et ensuite imbiber un pli de tissu 9.7 oz.			
Date: <u>20/06/13</u>		Sceau: <u>4440 CS</u> 	
15.0	BAGGING	Faire le bagging sur la pièce	
			
Comment Setup: 0.00Hrs/ Run: 10.0000Min Total Run : 0.1667Hrs			
Faire la poche à vide selon IG 0012.			
Laisser sécher pendant 4 heures minimum.			
Heure début Curing: <u>11h05</u>		Heure Fin Curing: <u><del>11h40</del></u>	
Date: <u>20/06/13</u>		sceau: <u>4440 CS</u> 	
16.0	AMB0286	Catalyst N° DDM-9	
Comment Qty.: 0.0120 GALLON(s)/Unit Total : 0.0120 GALLON(s) Catalyst N° DDM-9 N° de Lot: <u>1-27829-1</u>			
17.0	AMB0212	Résine (411B7530) 411-350 promo. 75min.	
Comment Qty.: 0.300 LITRE(s)/Unit Total : 0.300 LITRE(s) Résine (411B7530) 411-350 promo. 75min N° de Lot: <u>1-41438-1</u>			
18.0	PREP-GENERAL	Préparation du matériel	
			
Comment Setup: 0.00Hrs/ Run: 5.0000Min Total Run : 0.0833Hrs			
Faire la préparation de la résine selon les quantités requises, mix ratio 1.5% catalyst par quantité de résine et imbiber toutes les surfaces du Foam Core selon IG0105.			
Date: <u>20/06/13</u>		Sceau: <u>4440 CS</u>	
19.0	DKC134-0057	Foam Core N° D3186-102 ( Porte D3186-2 )	
Comment Qty.: 1 UNITE(s)/Unit Total : 1 UNITE(s) Foam Core N° D3186-102 ( Porte D3186-2 ) N° de Job: <u><del>52721</del> 53583</u>			

Date: Mardi, 2013-06-18 12:42:04

Utilisateur: Stéphane Lessard

**Feuille de Procédé**

Client: DART US DART AEROSPACE

Nom Dessin: SPACEPOD DOOR RH

Numéro Job: 53503

Numéro DKC134-0060

Numéro Job:



# Séq.: Machine ou Opération: Description :

20.0 AAC1611 Polybond B46F

Comment Qty.: 0.090 KIT(s)/Unit Total: 0.090 KIT(s)

Polybond B46F

N° de Lot: 1-38189-1

21.0 ASSEMBLAGE Assemblage mécanique



Comment Setup: 0.00Hrs/ Run: 15.0000Min Total Run: 0.2500Hrs

Retirez le bagging.

Pour aider au positionnement de 13 oz., positionner le gabarit de trimage dans le moule et tracer son contour sur le 9 oz. Retirez le gabarit de trimage.

Positionner le foam core à l'aide du gabarit prévu à cet effet et tracer le contour sur le 9 oz. ( Vous devriez maintenant avoir 2 contours de tracé sur le 9 oz.)

Appliquer une couche de Polybond B64F à l'endos du Foam Core N° DKC134-0057 et positionner le foam Core sur le moule selon le dessin, et selon les lignes de positionnement prévues à cet effet.

Date: 25/06/13 Sceau: 4460 R.L.



22.0 BAGGING Faire le bagging sur la pièce



Comment Setup: 0.00Hrs/ Run: 10.0000Min Total Run: 0.1667Hrs

Faire la poche à vide selon IG 0012.

Retirer le bagging avant la fin de la polymérisation (entre 1h et 1h30) afin d'enlever le surplus de Polybond.

Heure début Curing: 1:00

Heure Fin Curing: 2:15

Date: 25/06/13 sceau: 4460 R.L.



23.0 AMB0286 Catalyst N° DDM-9

Comment Qty.: 0.0400 GALLON(s)/Unit Total: 0.0400 GALLON(s)

Catalyst N° DDM-9

N° de Lot: 1-27829-1

24.0 AMB0212 Résine (411B7530) 411-350 promo. 75min.

Comment Qty.: 1.000 LITRE(s)/Unit Total: 1.000 LITRE(s)

Résine (411B7530) 411-350 promo. 75min

N° de Lot: 1-41438-1

Date: Mardi, 2013-06-18 12:42:04  
Utilisateur: Stéphane Lessard

## Feuille de Procédé

Client: DART US DART AEROSPACE  
Numéro Job: 53503

Nom Dessin: SPACEPOD DOOR RH  
Numéro DKC134-0060

Numéro Job:



# Séq.:	Machine ou Opération:	Description :
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25.0	PREP-GENERAL	Préparation du matériel
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Comment Setup: 0.00Hrs/ Run: 5.0000Min Total Run : 0.0833Hrs

Faire la préparation de la résine selon les quantités requises, mix ratio 1.5% catalyst par quantité de résine.

Date: 26/06/13 Sceau:



4460 R.L.

26.0	LAMINAGE	Faire le laminage
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Comment Setup: 0.00Hrs/ Run: 30.0000Min Total Run : 0.5000Hrs

Faire le laminage d'un pli de 9.7 oz.

Faire le laminage d'un pli de 13 oz. tout le tour de la porte.

Faire le laminage d'un pli de 9.7 oz.

Date: 26/06/13 Sceau:



4460 R.L.

27.0	BAGGING	Faire le bagging sur la pièce
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Comment Setup: 0.00Hrs/ Run: 10.0000Min Total Run : 0.1667Hrs

Faire la poche à vide selon IG 0012.

Laissez Sécher 4 heures minimum

Heure début Curing: 10:30

Heure Fin Curing: \_\_\_\_\_

Date: 26/06/13 Sceau:



4460 R.L.

28.0	DÉMOULAGE	Démoulage de la pièce
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Comment Setup: 0.00Hrs/ Run: 5.0000Min Total Run : 0.0833Hrs










Démouler la pièce en faisant bien attention aux coins & Edges.

Sabler la surfaces de la pièce qui était en contact avec le moule afin d'éliminer le fini lisse de celui-ci.

Date: 27-06-13 Sceau:












## Feuille de Procédé

Client: DART US DART AEROSPACE		Nom Dessin: SPACEPOD DOOR RH	
Numéro Job: 53503		Numéro DKC134-0060	
Numéro Job:			
# Séq.:	Machine ou Opération:	Description :	
29.0	TRIMAGE	Trimage	
			
Comment Setup: 0.00Hrs/ Run: 30.0000Min Total Run : 0.5000Hrs			
Trimer le contour de la pièce à l'aide du gabarit de trimage prévu à cet effet.			
Date: <u>28-06-13</u> Sceau: <u>RL 4466</u>			
30.0	AAC1021	Dupont Primer N° 7704S	
Comment Qty.: 0.1400 UNITE(s)/Unit Total : 0.1400 UNITE(s) Dupont Primer N° 7704S N° de Lot: <u>1-39123-1</u>			
31.0	AAC1101	N° 7775S, Dupont Activator - Reducer Chromabase	
Comment Qty.: 0.0283 UNITE(s)/Unit Total : 0.0283 UNITE(s) N° 7775S, Dupont Activator - Reducer Chromabase N° de Lot: <u>1-38821-1</u>			
32.0	PRIMER	Application primer	
			
Comment Setup: 0.00Hrs/ Run: 30.0000Min Total Run : 0.5000Hrs			
Appliquer une couche de primer selon IG 0008.			
Date: <u>2-07-13</u> Sceau:  # de fiche de mélange: <u>6433</u>			
33.0	AAC1492	N° P-15-3, Adtech Micro Ultra Filler	
Comment Qty.: 0.010 GALLON(s)/Unit Total : 0.010 GALLON(s) N° P-15-3, Adtech Micro Ultra Filler N° de Lot: <u>1-40986-1</u>			
34.0	FINITION	Finition Générale	
			
Comment Setup: 0.00Hrs/ Run: 0.0000Min Total Run : 0.0000Hrs			
Faire les réparations de finition si nécessaire à l'aide du "Filler" P15-3.			
Faire un léger sablage (Grit 220) de toutes les surfaces.			
Date: <u>4/07/13</u> sceau: 			
35.0	AAC1021	Dupont Primer N° 7704S	
Comment Qty.: 0.1400 UNITE(s)/Unit Total : 0.1400 UNITE(s) Dupont Primer N° 7704S N° de Lot: _____			



## Feuille de Procédé

Client: DART US DART AEROSPACE		Nom Dessin: SPACEPOD DOOR RH	
Numéro Job: 53503		Numéro DKC134-0060	
Numéro Job:			
# Séq.:	Machine ou Opération:	Description :	
36.0	AAC1101	N° 7775S, Dupont Activator - Reducer Chromabase	
Comment Qty.: 0.0300 UNITE(s)/Unit Total : 0.0300 UNITE(s) N° 7775S, Dupont Activator - Reducer Chromabase N° de Lot: <u>1-39123-1 + 1-40542-1</u>			
37.0	PRIMER	Application primer	
			
Comment Setup: 0.00Hrs/ Run: 0.0000Min Total Run : 0.0000Hrs			
Appliquer une couche de primer selon IG 0008.			
Date: <u>06-07-13</u> Sceau:  # de Fiche de mélange: <u>3437</u>			
38.0	INSPEC FINAL	Inspection finale	
			
Comment Setup: 0.00Hrs/ Run: 5.0000Min Total Run : 0.0833Hrs			
Faire l'inspection finale par la qualité selon le dessin.			
Date: <u>11 juillet 13</u> Sceau: 			
39.0	EMBAL / ENTREPO	Emballage & Entreposage	
			
Comment Setup: 0.00Hrs/ Run: 0.0000Min Total Run : 0.0000Hrs			
Emballer et entreposer selon IG 0057.			
Date: <u>11 juillet 13</u> Sceau: <u>4451 SM</u>			